

gulam & t Aream Curvæ quadrandæ, & d, e, f, g, g. h, " sunt quantitates datæ cum signis suis + & -.

TABULA

Curvarum simpliciorum quæ quadrari possunt.

Curvarum formæ. Curvarum areæ.

Forma prima.

$$dz^{n-1} = y. \quad \frac{d}{n} z^n = t.$$

Forma secunda.

$$\frac{dz^{n-1}}{ce - \frac{1}{2}efz - \frac{1}{2}ffz^2} = y. \quad \frac{dz^n}{nce - \frac{1}{2}nefz - \frac{1}{2}nffz^2} = t, \text{ vel } \frac{-d}{nce - \frac{1}{2}nefz - \frac{1}{2}nffz^2} = t.$$

Forma tertia.

$$\begin{aligned} 1. & dz^{n-1} \sqrt{e + fz^n} = y. \quad \frac{2d}{3nf} R^3 = t, \text{ existente } R = \sqrt{e + fz^n} \\ 2. & dz^{2n-1} \sqrt{e + fz^n} = y. \quad \frac{-4e - 6fz^n}{15nf} dR^3 = t. \\ 3. & dz^{3n-1} \sqrt{e + fz^n} = y. \quad \frac{16ce - 24efz^n + 3offz^{2n}}{105nf^3} dR^3 = t. \\ 4. & dz^{4n-1} \sqrt{e + fz^n} = y. \quad \frac{-96e^3 - 144eefz^n - 18oeffz^{2n} + 21of^3z^{3n}}{945nf^4} dR^3 = t. \end{aligned}$$

Forma quarta.

$$\begin{aligned} 1. & \frac{dz^{n-1}}{\sqrt{e + fz^n}} = y. \quad \frac{2d}{nf} R = t. \\ 2. & \frac{dz^{2n-1}}{\sqrt{e + fz^n}} = y. \quad \frac{-4e - 2fz^n}{3nf} dR = t. \end{aligned}$$

dz^{3n-1}

$$\begin{aligned} 3. & \frac{dz^{3n-1}}{\sqrt{e + fz^n}} = y. \\ 4. & \frac{dz^{4n-1}}{\sqrt{e + fz^n}} = y. \end{aligned}$$

T

Curvarum simpliciorum

Hyperbolicarum

Sit jam aGD v
Conica cujus area a
positæ requiritur, fit
Vertex a, Semiaxis co
principium A vel a v
aB=x, Ordinata r
ABDP vel aBDG ve
dinata ad punctum a.
catur Tangens DT o
& compleatur paral
fiquando ad quadrat
runtur areæ duarum
tur posterioris Abscissæ
Sit autem ÷ differenti
certum est utrum post
teriori subduci debeat